

the E7 early polypeptide and of DNA sequence coding for the L2 late polypeptide of human papillomavirus; said DNA sequences being placed under the control of the elements necessary for their expression in a host cell or organism and wherein said composition does not comprise one or more recombinant vectors into which are inserted DNA sequences coding for at least one polypeptide having an immunostimulatory activity.

39. (Amended) The composition of claim 32, wherein said early polypeptide is E6 or the E7 or the E6 and E7 polypeptide of a papillomavirus .

40. (Amended) The composition of claim 32, wherein said early polypeptide is a nononcogenic E6 and/or E7 polypeptide of a papillomavirus.

41. The composition of claim 32, wherein said late polypeptide is L1 or the L2 or the L1 and L2 polypeptide of a papillomavirus

42. (Amended) The composition of claim 32, wherein said DNA sequences encode the early E6 and E7 polypeptide and the late L1 and L2 polypeptide of a papillomavirus.

44. (Amended) A composition comprising one or more recombinant vectors into which are inserted (i) at least one DNA sequence coding for an early polypeptide of a

~~papillomavirus and (ii) at least one DNA sequence coding fro a late polypeptide of a papillomavirus, with the exception of the specific combination of DNA sequence coding for te E7 early polypeptide and DNA sequence coding for the L2 late polypeptide of human papillomavirus; said DNA sequences being placed under the control of the elements necessary for their expression in a host cell or organism and further comprising one or more recombinant vectors into which are inserted DNA sequences coding for at least one polypeptide having an immunostimulatory activity wherein said DNA sequences are placed under the control of the elements necessary for their expression in a host cell or organism and wherein said polypeptide having an immunostimulatory activity is selected from the group consisting of interleukin-2, interleukin-7, the co-adhesion molecule B7.1 and the co-adhesion molecule B7.2.~~

46. (Amended) The composition of claim 44, wherein the polypeptide having an immunostimulatory activity is interleukin-2.

48. (Amended) The composition of claim 44, comprising one or more recombinant vectors into which are inserted :

- (a) a DNA sequence coding for the E6 polypeptide of a papillomavirus, a DNA sequence coding for the E7 polypeptide of a papillomavirus, a DNA sequence coding for the L1 polypeptide of a papillomavirus, a DNA

sequence coding for the L2 polypeptide of a papillomavirus and a DNA

sequence coding for the co-adhesion molecule B7.1, or

(b) a DNA sequence coding for the E6 polypeptide of a papillomavirus, a DNA

sequence coding for the E7 polypeptide of a papillomavirus, a DNA

sequence coding for the L1 polypeptide of a papillomavirus, a DNA

sequence coding for the L2 polypeptide of a papillomavirus and a DNA

sequence coding for interleukin-2, or

(c) a DNA sequence coding for the E6 polypeptide of a papillomavirus, a DNA

sequence coding for the E7 polypeptide of a papillomavirus, a DNA

sequence coding for the L1 polypeptide of a papillomavirus, a DNA sequence

coding for the L2 polypeptide of a papillomavirus, a DNA sequence coding

for the co-adhesion molecule B7.1 and a DNA sequence coding for

interleukin-2.

52. (Amended) The composition of claim 44, further comprising a

pharmaceutically acceptable carrier

Kindly add new claims 57-80.

57. (New) The composition of claim 40, wherein said nononcogenic variant E6

polypeptide is a HPV-16 E6 polypeptide deleted of amino acids 111-115.

58. (New) The composition of claim 40, wherein said nononcogenic variant E7

polypeptide is a HPV-16 E7 polypeptide deleted of amino acids 21-26.

59. (New) The composition of claim 44, wherein said recombinant vector is a

viral vector selected from the group consisting of poxviral, adenoviral, retroviral, herpes viral and adenoassociated viral vectors.

60. (New) The composition of claim 59, wherein said recombinant vector is

selected from the group consisting of vaccinia, canarypox and fowlpox vectors.

61. (New) The composition of claim 60, wherein said recombinant vector is

selected from the group consisting of Copenhagen, Wyeth and modified Ankara (MVA) strains.

62. (New) The composition of claim 60, wherein said elements necessary for the

expression of the DNA sequences comprise a promoter selected from the group consisting of the promoters of the thymidine kinase (TK), 7.5K, H5R and K1L genes.

63. (New) The composition of claim 61, wherein said recombinant vector is a

Copenhagen strain and wherein said DNA sequences are inserted into the TK locus and/or the K1L locus of said viral vector.

Sub. H1
Sub. H1
D9
Sub. H1
64. (New) The composition of claim 61, wherein said recombinant vector is a MVA strain and wherein said DNA sequences are inserted into at least one of the excision region selected from the I, II, III, IV, V and VI excision regions of said viral vector.

65. (New) A composition comprising one or more recombinant vectors into which are inserted (i) at least one DNA sequence coding for a polypeptide from an early or late region of a papillomavirus and (ii) at least one DNA sequence coding for a polypeptide having an immunostimulatory activity; said DNA sequences being placed under the control of the elements necessary for their expression in a host cell or organism and wherein said polypeptide having an immunostimulatory activity is selected from the group consisting of interleukin-2, interleukin-7, the co-adhesion molecule B7.1 and the co-adhesion molecule B7.2.

66. (New) The composition of claim 65, wherein said recombinant vector is a viral vector selected from the group consisting of poxviral, adenoviral, retroviral, herpes viral and adenoassociated viral vectors.

67. (New) The composition of claim 66, wherein said recombinant vector is selected from the group consisting of vaccinia, canarypox and fowlpox vectors.

68. (New) The composition of claim 67, wherein said recombinant vector is selected from the group consisting of Copenhagen, Wyeth and modified Ankara (MVA) strains.

Sub. 67
H1
Sub. 68
D9
69. (New) The composition of claim 67, wherein said elements necessary for the expression of the DNA sequences comprise a promoter selected from the group consisting of the promoters of the thymidine kinase (TK), 7.5K, H5R and K1L genes.

70. (New) The composition of claim 68, wherein said recombinant vector is a Copenhagen strain and wherein said DNA sequences are inserted into the TK locus and/or the K1L locus of said viral vector.

Sub. 68
H1
71. (New) The composition of claim 68, wherein said recombinant vector is a MVA strain and wherein said DNA sequences are inserted into at least one of the excision region selected from the I, II, III, IV, V and VI excision regions of said viral vector.

72. (New) The composition of claim 65, wherein the polypeptide having an immunostimulatory activity is interleukin-2.

73. (New) The composition of claim 65, wherein said papillomavirus polypeptide is the E6 or the E7 or the E6 and E7 polypeptide of a human papillomavirus.

Sub. 1
74. (New) The composition of claim 73, comprising one or more recombinant vaccinia virus from the Copenhagen or MVA strain into which are inserted a DNA sequence coding for the E6 polypeptide of HPV-16, a DNA sequence coding for the HPV-16 E7 polypeptide and a DNA sequence coding for interleukin-2.

D9
75. (New) The composition of claim 73, wherein said E6 and E7 polypeptide are, respectively, nononcogenic E6 and E7 polypeptides of a human papillomavirus.

76. (New) The composition of claim 75, wherein said nononcogenic E6 polypeptide is a HPV-16 E6 polypeptide deleted of amino acids 111-115.

77. (New) The composition of claim 75, wherein said nononcogenic E7 polypeptide is a HPV-16 E7 polypeptide deleted of amino acids 21-26.

78. (New) The composition of claim 65, further comprising a pharmaceutically acceptable carrier.

H1 Sub. 1
79. (New) A method for the treatment or prevention of dysplasia or cancer of the neck of the uterus, comprising administering an effective amount of the composition of claim 78 to a patient in need of such treatment.

80. (New) A method for the treatment or prevention of a papillomavirus infection, comprising administering an effective amount of the composition of claim 78 to a patient in need of such treatment.